

# SEARCH REQUEST FORM

112796

Requestor's Name: DAVE NGUYEN Serial Number: 101081, 463  
Date: 11/21/04 Phone: 571-270-0731 Art Unit: 1632

## Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

MEI

Please search the formula as set forth  
in clm 78

DAVE NG.

Random Bldg  
2D31

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Date completed: 11/31/04  
Searcher: Sheppard  
Terminal time: \_\_\_\_\_  
Elapsed time: \_\_\_\_\_  
CPU time: \_\_\_\_\_  
Total time: \_\_\_\_\_  
Number of Searches: \_\_\_\_\_  
Number of Databases: \_\_\_\_\_

Search Site  
\_\_\_\_ STIC  
\_\_\_\_ CM-1  
\_\_\_\_ Pre-S  
Type of Search  
\_\_\_\_ N.A. Sequence  
\_\_\_\_ A.A. Sequence  
\_\_\_\_ Structure  
\_\_\_\_ Bibliographic

Vendors  
\_\_\_\_ IG  
\_\_\_\_ STN  
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\_\_\_\_ APS  
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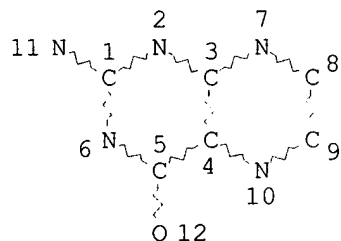
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FILE COVERS 1907 - 31 Jan 2004 VOL 140 ISS 6  
 FILE LAST UPDATED: 30 Jan 2004 (20040130/ED)

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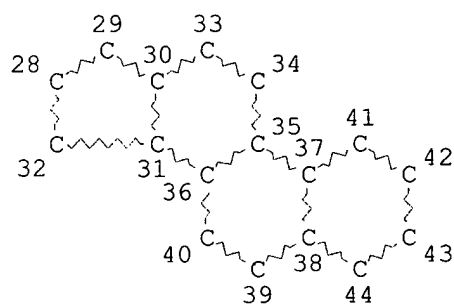
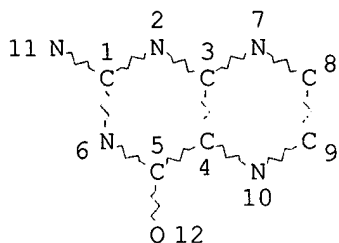
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NODE ATTRIBUTES:  
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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
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 NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE  
 L14 5245 SEA FILE=REGISTRY SSS FUL L12  
 L15 STR



NODE ATTRIBUTES:  
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 DEFAULT ECLEVEL IS LIMITED

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 NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE  
 L16 5 SEA FILE=REGISTRY SUB=L14 SSS FUL L15  
 L17 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L16

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=> d ibib abs hitrn l17 1-3

L17 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:696726 HCAPLUS

DOCUMENT NUMBER: 139:224407

TITLE: Folate-conjugated compns. for treatment of acute  
 myeloid leukemia by inducing folate receptor-.beta.  
 expression

INVENTOR(S): Lee, Robert J.; Ratnam, Manohar

PATENT ASSIGNEE(S): The Ohio State University Research Foundation, USA

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
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WO 2003072091      A1      20030904      WO 2003-US5961      20030227
W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
    CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
    GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
    LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
    PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
    UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
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RW:  GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
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    NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
    ML, MR, NE, SN, TD, TG
US 2003170299      A1      20030911      US 2003-375888      20030227
PRIORITY APPLN. INFO.:      US 2002-360408P      P      20020227
AB  The invention provides a method for treating leukemia in a patient. The
method comprises administering to the patient a substance that increases
expression of folate receptor-.beta. on leukemia cells in the patient, _
called a FR-.beta. inducer, and administering a folate-conjugated
therapeutic that targets the leukemia cells in the patient. The invention
also comprises pharmaceutical compns. contg. one or both of a FR-.beta.
inducer and a folate-conjugated therapeutic. The invention also provides
a kit for use in treating leukemia in a patient, the kit comprising an
FR-.beta. inducer and a folate-conjugated therapeutic.
IT  591752-80-6
RL:  PAC (Pharmacological activity); THU (Therapeutic use); BIOL
    (Biological study); USES (Uses)
    (folate-conjugated compns. for treatment of acute myeloid leukemia by
    inducing folate receptor-.beta. expression)
REFERENCE COUNT:      2      THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
                        RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L17 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:725435 HCAPLUS
DOCUMENT NUMBER: 133:301170
TITLE: Fusogenic lipids and vesicles for delivery of
pharmaceutical agents
INVENTOR(S): Leamon, Christopher Paul
PATENT ASSIGNEE(S): Isis Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
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| PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE     |
|---------------|--|----------|-----------------|----------|
| WO 2000059474 | A1   | 20001012 | WO 2000-US9473  | 20000406 |
| W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |          |                 |          |
| RW:           | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG   |          |                 |          |
| US 6379698    | B1   | 20020430 | US 1999-287175  | 19990406 |
| EP 1165047    | A1   | 20020102 | EP 2000-921959  | 20000406 |
| R:            | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO   |          |                 |          |
| JP 2002541089 | T2   | 20021203 | JP 2000-609038  | 20000406 |

US 2003082154 A1 20030501 US 2002-81463 20020222  
 PRIORITY APPLN. INFO.: US 1999-287175 A 19990406  
 WO 2000-US9473 W 20000406

OTHER SOURCE(S): MARPAT 133:301170

AB Novel lipid compds. are provided that may be termed "pro-cationic" in that they are neutral or neg. charged until they are either brought into contact with cellular membranes or are internalized by cells. The lipids have a hydrophobic tail group and a hydrophilic head group, the head group incorporating both a pos. and neg. charged region at physiol. pH. The hydrophobic tail group is stably connected to the pos. region of the head group which in turn is connected to the neg. region by a disulfide bond that is susceptible to cleavage by membrane-bound and intracellular factors. Cleavage of the disulfide bond removes the neg. charged region from the head group resulting in a lipid that is cationic and therefore fusogenic with neg. charged cell membranes. Consequently, lipids of the invention are useful as components of liposomes that serve as vehicles for delivering pharmaceutical agents into cells with reduced toxicity. Cholesteryl-[N-[(1-amidonobutyl)aminoethyl]carbonyl]-dithiosuccinate (CHETSu) was prepd., and mixed with dioleoylphosphatidylethanolamine (DOPE). A phosphorothioate backbone oligonucleotide ISIS-5132 soln. was prepd. and added to the lipids to form large multi-lamellar liposomes.

IT 300711-56-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(fusogenic lipids and vesicles for liposome drug delivery systems)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1992:235322 HCAPLUS

DOCUMENT NUMBER: 116:235322

TITLE: Novel regio- and stereoselective synthesis of 6-substituted pteridines and naturally occurring L-erythro-biopterin

AUTHOR(S): Murata, Shizuaki; Sugimoto, Takashi; Ogiwara, Shoji; Mogi, Kouichi; Wasada, Hiroaki

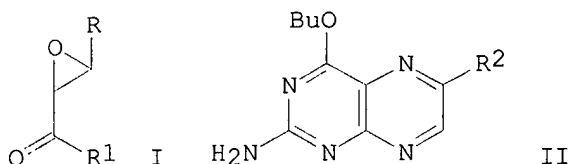
CORPORATE SOURCE: Coll. Gen. Educ., Nagoya Univ., Nagoya, 464-01, Japan

SOURCE: Synthesis (1992), (3), 303-8  
 CODEN: SYNTBF; ISSN: 0039-7881

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Condensation of 2,4,5-triamino-6-butoxypyrimidine with 2-formyloxiranes I (R = Me, Pr, Ph, R1 = H; R = H, R1 = Me) followed by oxidn. with iodine affords 2-amino-4-butoxy-6-(1-hydroxyalkyl)pteridines II (R2 = CHROH, Me) regioselectively. Naturally occurring L-erythro-biopterin is synthesized from (1S,2S,3S)-2-formyl-3-(1-hydroxyethyl)oxirane. The reaction proceeds via 5,6-dihydropteridine, and the mechanism is discussed with the help of MO calcs.

IT 141191-98-2P 141271-04-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and hydrolysis of)  
IT 141191-96-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

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FILE 'CAOLD' ENTERED AT 18:51:47 ON 31 JAN 2004  
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FILE COVERS 1907-1966  
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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L18 0 L16

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 30 JAN 2004 HIGHEST RN 644468-14-4  
DICTIONARY FILE UPDATES: 30 JAN 2004 HIGHEST RN 644468-14-4

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

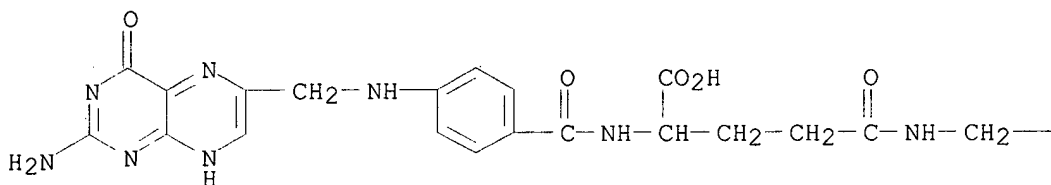
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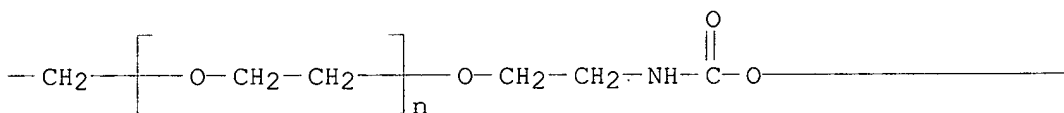
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L16 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 591752-80-6 REGISTRY  
 CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[[(4S)-4-[[[4-[[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]amino]-4-carboxy-1-oxobutyl]amino]ethyl]-.omega.-[2-[[[(3.beta.)-cholest-5-en-3-yloxy]carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)  
 MF (C2 H4 O)<sub>n</sub> C51 H73 N9 O8  
 CI PMS  
 PCT Polyether  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

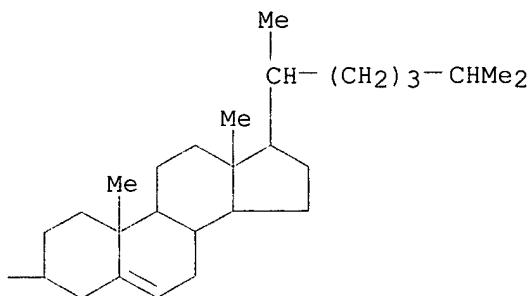
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PAGE 1-B



PAGE 1-C

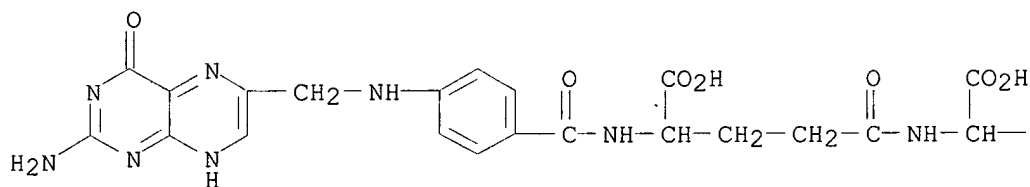


1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:224407

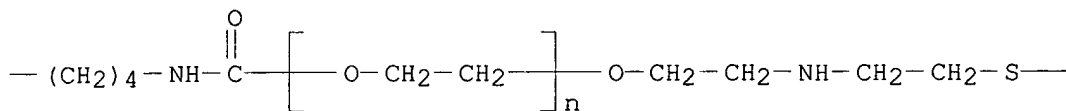
L16 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 300711-56-2 REGISTRY  
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-[[16-[(3.beta.)-cholest-5-en-3-yloxy]-11-imino-16-oxo-6,7-dithia-3,12,15-triazahexadec-1-yl]oxy]-, 26-ester with N-[4-[[[(2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-L-.gamma.-glutamyl-N6-carboxy-L-lysine (9CI) (CA INDEX NAME)  
MF (C2 H4 O)n C64 H97 N13 O11 S2  
CI PMS  
PCT Polyether  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PAGE 1-A

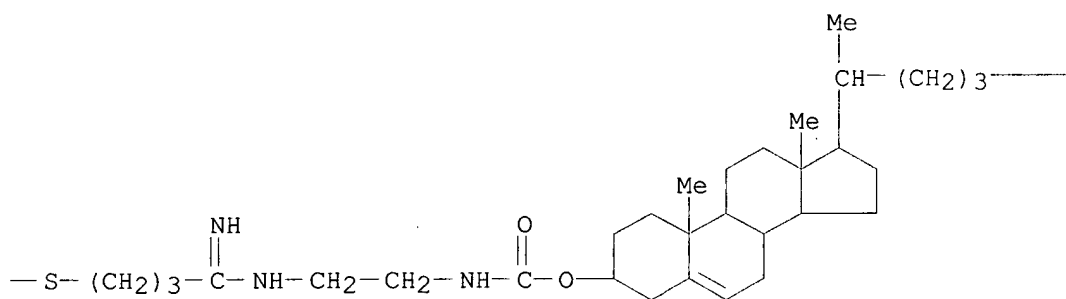




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PAGE 1-C



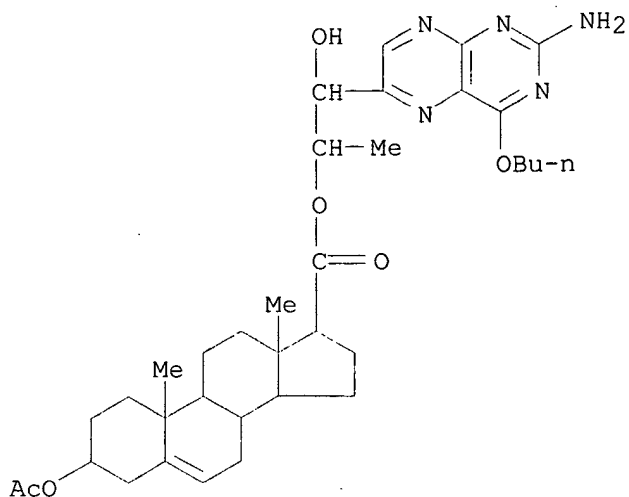
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1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:301170

L16 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2004 ACS.on STN  
RN 141271-04-7 REGISTRY  
CN Androst-5-ene-17-carboxylic acid, 3-(acetyloxy)-, 2-(2-amino-4-butoxy-6-pteridinyl)-2-hydroxy-1-methylethyl ester, [3.beta.,17.beta.(1R,2S)]-(9CI) (CA INDEX NAME)  
MF C35.H49.N5.O6  
SR CA  
LC STN Files: BEILSTEIN\*, CA, CAPLUS  
(\*File contains numerically searchable property data)

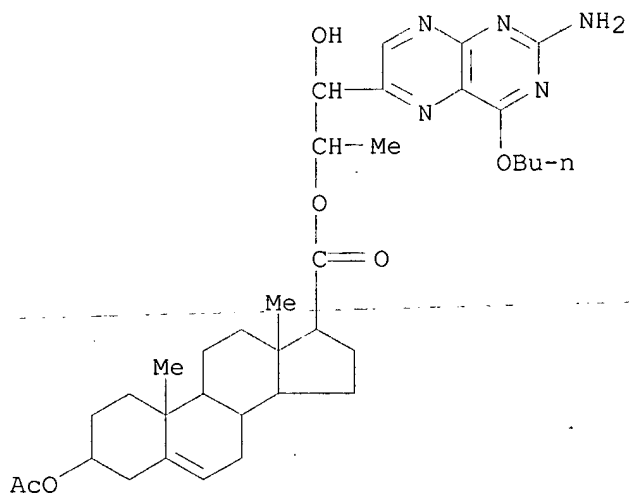


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1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 116:235322

L16 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 141191-98-2 REGISTRY  
CN Androst-5-ene-17-carboxylic acid, 3-(acetyloxy)-, 2-(2-amino-4-butoxy-6-pteridiny)-2-hydroxy-1-methylethyl ester, [3.beta.,17.beta.(1S,2R)]-(9CI) (CA INDEX NAME)  
MF C35 H49 N5 O6  
SR CA  
LC STN Files: BEILSTEIN\*, CA, CAPLUS  
(\*File contains numerically searchable property data)

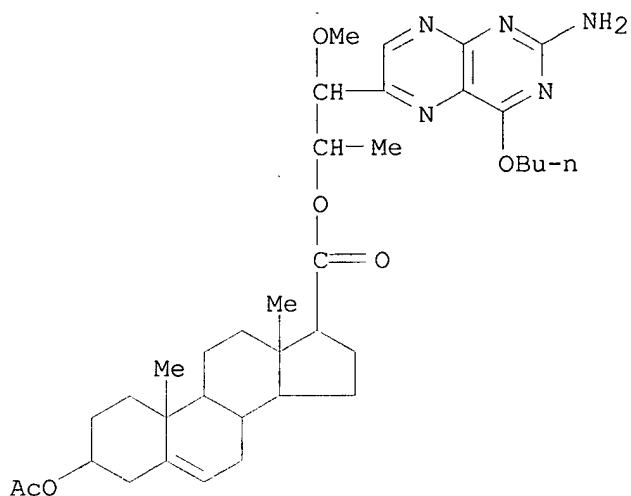


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1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 116:235322

L16 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 141191-96-0 REGISTRY  
CN Androst-5-ene-17-carboxylic acid, 3-(acetyloxy)-, 2-(2-amino-4-butoxy-6-pteridiny1)-2-methoxy-1-methylethyl ester, [3.beta.,17.beta.(1S)]- (9CI)  
(CA INDEX NAME)  
MF C36 H51 N5 O6  
SR CA  
LC STN Files: BEILSTEIN\*, CA, CAPLUS  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 116:235322